

What is claimed is:

1. A method for controlling congestion in a communications network, including:
  - 5 receiving congestion feedback data relating to said network;
  - adjusting at least one of a window limit and a rate limit based on said congestion feedback data; and
  - injecting data packets onto said network according to said window limit and said rate limit.
- 10 2. A method according to claim 1, wherein said adjusting includes:
  - 15 decreasing said rate limit and said window limit if said network is determined to be congested based on said congestion feedback data.
3. A method according to claim 1, wherein said adjusting includes:
  - 20 increasing, based on a limiting factor, at least one of said rate limit and said window limit if said network is determined not to be congested based on said congestion feedback data.
- 25 4. A method according to claim 3, wherein said limiting factor is determined based on whether the transmission of a data packet was most recently limited by at least one of said rate limit and said window limit.
- 30 5. A method according to claim 4, wherein only said rate limit is increased if said limiting factor is determined by said rate limit.

6. A method according to claim 4, wherein only said window limit is increased if said limiting factor is determined by said window limit.
- 5 7. A method according to claim 4, wherein both said rate limit and said window limit is increased if said limiting factor is determined by both said rate limit and said window limit.
- 10 8. A method according to claim 4, wherein said limiting factor is a value between a predetermined high threshold and a predetermined low threshold.
- 15 9. A method according to claim 4, wherein said determining of said limiting factor includes increasing or decreasing said limiting factor by an amount corresponding to the size of the data packet for which injection was limited.
- 20 10. A method according to claim 9, wherein said limiting factor is increased by said amount if the transmission of a data packet was limited by said window limit.
- 25 11. A method according to claim 9, wherein said limiting factor is decreased by said amount if the transmission of a data packet was limited by said rate limit.
- 30 12. A method according to claim 1, wherein said adjusting is performed by an Additive Increase Multiplicative Decrease response process.

13. A system for controlling congestion in a communications network, including:

5 a congestion control module adapted to adjust at least one of a window limit and a rate limit based on congestion feedback data relating to said network, and to limit injection of packets into said network according to said window limit and said rate limit.

10 14. A system according to claim 13, wherein said congestion control module is adapted to decrease said rate limit and said window limit if said network is determined to be congested based on said congestion feedback data.

15 15. A system according to claim 13, wherein said congestion control module is adapted to increase, based on a limiting factor, at least one of said rate limit and said window limit if said network is determined not to be congested based on said congestion feedback data.

20 16. A system according to claim 15, further including means for determining said limiting factor based on whether the transmission of a data packet was most recently limited by at least one of said rate limit and said window limit.

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17. A system for controlling congestion in a communications network, comprising:

means for receiving congestion feedback data relating to said network;

30 means for adjusting at least one of a window limit and a rate limit based on said congestion feedback data; and

means for injecting data packets onto said network according to said window limit and said rate limit.

18. A system according to claim 17, wherein said means for  
5 adjusting includes:

means for decreasing said rate limit and said window limit if said network is determined to be congested based on said congestion feedback data.

- 10 19. A system according to claim 17, wherein said means for adjusting includes:

means for increasing, based on a limiting factor, at least one of said rate limit and said window limit if said network is determined not to be congested based on  
15 said congestion feedback data.

20. A system according to claim 19, wherein said limiting factor is determined based on whether the transmission of a data packet was most recently limited by at least  
20 one of said rate limit and said window limit.

21. A computer program product for controlling congestion in a communications network, the computer program product including a computer usable medium having computer  
25 readable code embodied in the computer usable medium, the computer readable code including instructions for:  
receiving congestion feedback data relating to said network;  
adjusting at least one of a window limit and a  
30 rate limit based on said congestion feedback data; and  
injecting data packets onto said network according to said window limit and said rate limit.

22. A computer program product according to claim 21,  
wherein said adjusting includes:  
decreasing said rate limit and said window limit  
5 if said network is determined to be congested based on  
said congestion feedback data.
23. A computer program product according to claim 21,  
wherein said adjusting includes:  
10 increasing, based on a limiting factor, at least  
one of said rate limit and said window limit if said  
network is determined not to be congested based on said  
congestion feedback data.
- 15 24. A computer program product according to claim 23,  
wherein said limiting factor is determined based on  
whether the transmission of a data packet was most  
recently limited by at least one of said rate limit and  
said window limit.